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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/086,552	03/04/2002	Robert J. Macomber	P 279036	5327

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EXAMINER
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HYUN, PAUL SANG HWA

ART UNIT	PAPER NUMBER
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1743

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/08/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	Application No. 10/086,552	Applicant(s) MACOMBER, ROBERT J.	
	Examiner Paul S. Hyun	Art Unit 1743	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 19 January 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-8 and 10-14 is/are pending in the application.  
4a) Of the above claim(s) 10-14 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### REMARKS

Claims 1-8 and 10-14 are pending. The R.C.E. submitted by Applicant has been acknowledged. Applicant amended claims 1, 3-5 and 10 along with the R.C.E.

Applicant's argument that the amendments have mooted the restriction requirement imposed on 12/28/05 has been fully considered, but it is not persuasive. As indicated before, the elected claims 1-8 and the non-elected claims 10-14 are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case the apparatus can be used to store and dispense filaments without being used to contact the filaments with a sample.

Although the amended apparatus claims now recite a manipulating mechanism, the claimed apparatus does not necessarily have to be used to bring the filaments into contact with a sample. The apparatus is designed to perform other functions, such as storing filaments.

Because Applicant's argument is not persuasive, the restriction requirement is maintained and claims 10-14 remain withdrawn from further consideration by the Examiner.

Despite the amendments, the art rejections cited in the previous Office action are maintained.

***Specification***

The amendment is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows:

The amended claims recite a "manipulating mechanism". However, the originally filed Specification does not provide support for a "manipulating mechanism" or any structural feature that corresponds to the claimed "manipulating mechanism".

[0019] of the Specification discloses a method for bringing filaments into contact with a sample. However, the disclosure does not specify what or if any specific structural mechanism is used to achieve this method. Rather, it appears from the disclosure that the method is achieved by manually manipulating the apparatus and the filaments.

Applicant is required to cancel the new matter in the reply to this Office Action.

***Claim Rejections - 35 USC § 112***

Claims 1-8 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The amended claims recite a "manipulating mechanism". However, the originally filed Specification does not provide support for a "manipulating mechanism" or a structural feature that corresponds to the claimed "manipulating mechanism".

[0019] of the Specification discloses a method for bringing filaments into contact with a sample. However, the disclosure does not specify what or if any specific structural mechanism is used to achieve this method. Rather, it appears from the disclosure that the method is achieved by manually manipulating the apparatus and the filaments.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims **1-5, 7 and 8** are rejected under 35 U.S.C. 103(a) as being unpatentable over Marino (US 6,132,684) in view of Emmitt (US 4,124,122).

Marino discloses a test tube rack 100 comprising three plates (102, 104 and 106) supported by legs 115 and pins 120 and an actuating handle assembly 144 comprising an actuating handle 154. Each plate comprises machined holes 108, and the corresponding holes of the plates are configured to align with one another (see FIG 2). Plate 106 is also capable of shifting in a horizontal direction with respect to the other plates to provide a means to secure the tubes placed therein (see claim 1). When a manipulating mechanism in the form of actuating handle 154 is moved into a horizontal

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engaging position, plate 106 shifts and firmly secures the test tubes 184 in their corresponding tube accommodating holes 114 (see lines 35-42, col. 7). The actuating handle assembly 144, which supports the three plates and facilitates the horizontal movement of plate 106 (see lines 47-57, col. 6), is spring biased (see Figs. 10-12) and adjustable by adjusting the positions of blocks 146 (see lines 32-40, col. 6).

Although the reference does not specifically disclose that the rack is adapted to store the different types of filaments recited in the claims, given that the diameter of the holes of the rack disclosed by Marino is larger than the diameter of a "filament" as construed by the Specification of the instant application, it appears that the rack is dimensioned to accept a filament and permit unrestricted passage of a filament through the holes of the rack.

The rack disclosed by Marino differs from the claimed invention in that the reference does not disclose that the holes are chamfered.

Emmitt discloses a test tube rack adapted to accommodate test tubes. The surface defining each hole of the test tube rack comprises a groove/chamfer in which is disposed an O-ring. The O-ring is adapted to secure the test tubes within the rack by frictionally engaging the test tubes (see Abstract).

In light of the disclosure of Emmitt, it would have been obvious to one of ordinary skill in the art to chamfer the holes of the rack disclosed by Marino so that they would be able to accommodate O-rings that can frictionally engage the test tubes.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Marino in view of Emmitt as applied to claim 1, and further in view of De Graaff et al. (US 6,146,594).

Neither Marino nor Emmitt specifically disclose the arrangement of the holes of a test tube rack. However, the plate patterns recited in the claim are well-known in the art. De Graaff et al. disclose that the Society of Biomolecular Screening has standardized well plate arrangements on a variety of plate formats. Some established arrangements include 96 and 384 well plate designs (see lines 15-25, col. 1).

It would have been obvious to one of ordinary skill in the art to provide 96 or 384 holes in an array format to the plates of the modified Marino/Emmitt rack so that a large number of test tubes can be accommodated.

### ***Response to Arguments***

Applicant's arguments with respect to claims 1-8 have been considered but they are not persuasive.

It should be noted that the claims do not recite any structural feature of the claimed "manipulating mechanism". Rather, claims further limit the "manipulating mechanism" by the functions that it enables. It should be noted that any structure that enables the positioning and dispensing of the contents of the claimed device anticipates the functional language. The limitation "drawing samples into the multiple filaments or adhering the samples to the multiple filaments" does not further limit the claimed "manipulating mechanism" because the claimed "manipulating mechanism" is not the entity that is performing the action. Rather, the filaments are performing the action. In

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this instance, it appears that the actuating handle 154 disclosed by Marino would permit the claimed functions if filaments were stored in the rack disclosed by Marino. As indicated in the rejection above, the actuating handle shifts plate 106, enabling the contents of the rack to be positioned and dispensed in and out of the rack.

With respect to claims 3-5, the claims do not explicitly recite that the device comprises the recited filaments. Therefore, limitations directed towards the filaments do not further limit the device.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul S. Hyun whose telephone number is (571)-272-8559. The examiner can normally be reached on Monday-Friday 8AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill Warden can be reached on (571)-272-1267. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

PSH  
3/2/07

  
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